ABSTRACT

A method for practical QoS routing, which provides a solution to the delay constrained least cost routing problem, is presented. The method uses the concept of aggregated costs and finds the optimal multiplier based on Lagrange relaxation. The method is polynomial in running time, and produces a theoretical lower bound (i.e. optimal solution), along with the result. The differences between the lower bound and result are small, indicating the quality of the result. Additionally, by further relaxing the desire for an optimal solution, an option is provided to control the trade-off between running time of the algorithm and quality of the result.